

## **7.0 Proficiency Testing (PT)**

### **7.1 Initial Accreditation / Acceptance**

#### **7.1.1 Initial Accreditation for DoD-ELAP or DOECAP**

To obtain initial accreditation for Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP) or Department of Energy Consolidated Audit Program (DOECAP) acceptance, the laboratory shall analyze at least two proficiency testing (PT) samples for each suite of analyte-matrix-method (e.g., Trichloroethylene (TCE)-water-Method 624, TCE-water-Method 8260, TCE-soil-Method 8260, lead-soil-6010, or lead-soil-6020) that corresponds to their scope of accreditation or acceptance. Laboratories that combine multiple methods into one Standard Operating Procedure (e.g., SOP that combines Method 624 volatiles & Method 8260 volatiles) can report those methods with a single PT sample. All other analyte-matrix-method suites require unique PT samples.

#### **7.1.2 PT Samples for Initial Accreditation**

The PT samples used for initial accreditation shall be obtained from PT providers that are accredited under International Organization for Standardization (ISO) 17043 (General Requirements for Proficiency Testing) from an International Laboratory Accreditation Council (ILAC) approved signatory Accreditation Body. For laboratories seeking DOECAP acceptance those PT samples shall be obtained from the Mixed Analyte Performance Evaluation Program (MAPEP). MAPEP is required for all laboratories that possess a radiological materials license for analysis of radiological samples.

#### **7.1.3 PT Samples not from ISO 17043 Accredited PT Provider**

When PT samples cannot be obtained from an ISO 17043 accredited PT provider, the laboratory shall obtain permission to use non-ISO 17043 PT providers from their Accreditation Body or DOECAP representative prior to analyzing the PT sample.

#### **7.1.4 PT Samples for Analyte-matrix-method not from PT Provider**

When PT samples for an analyte-matrix-method suite cannot be obtained from any PT provider and the analyte-matrix-method suite is required for a scope of accreditation, the laboratory shall submit this fact in writing to the DoD-ELAP Accreditation Body or appropriate DOECAP representative. Other measures (e.g., precision, bias, and selectivity) as outlined in the appropriate 2009 TNI Standard Test Modules must be performed to satisfy the PT requirement until those PT samples are available.

#### **7.1.5 Analysis Date of PT Samples**

The PT samples analyzed by the laboratory for initial DoD-ELAP accreditation or DOECAP acceptance shall be no more than twelve (12) months old. The analysis date between PT samples shall be at least fifteen (15) calendar days apart if two or more successive PT samples are performed.

### **7.1.6 PT Study Determination**

The success or failure of any analyte-matrix-method suites for a PT study shall be determined by the PT provider under the requirements of the governing regulatory or ISO 17043 statistically derived program.

### **7.1.7 PT Samples Same as Regular Environmental Samples**

In all cases, PT samples must be evaluated the same as regular environmental samples. A laboratory shall employ the same quality control, sequence of analytical steps, and replicates as used when analyzing routine samples.

## **7.2 Continuing Accreditation/Acceptance**

### **7.2.1 Maintaining Accreditation/Acceptance**

To maintain DoD-ELAP accreditation or DOECAP acceptance, the laboratory shall successfully analyze at least two PT samples per calendar year for each analyte-matrix-method suite on their scope of accreditation. Each PT sample shall be analyzed approximately six (6) months apart (i.e., any time frame from four (4) to eight (8) months apart is considered acceptable) if two PT samples are analyzed. A PT sample for Whole Effluent Toxicity (WET) testing is required at least once per year.

### **7.2.2 Laboratory PT History**

The laboratory shall maintain a history of at least two (2) successful PT rounds out of the most recent three (3) attempts for each analyte-matrix-method suite on their scope of accreditation. If PT samples are required for corrective action to reestablish history of successful PT rounds, the analysis dates of successive corrective action PT samples shall be at least fifteen (15) calendar days apart.

### **7.2.3 Failure to Meet Criteria**

Analyte-matrix-method suites that do not meet the above criteria must be removed from the DoD-ELAP scope of accreditation or applicable DOE acceptance list.